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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,032	08/28/2001	Thomas T. Yamashita	YAMA001CON9	7285

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EXAMINER

GELLNER, JEFFREY L

ART UNIT	PAPER NUMBER
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3643

DATE MAILED: 10/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/942,032

Applicant(s)

YAMASHITA, THOMAS T.

Examiner

Jeffrey L. Gellner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 29-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 29-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

PETER M. POON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 8000

PMP

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 42, 44, 46, 48, and 50 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claims 42, 44, 46, 48, and 50, line 3, "Katy-J" appears to be a brandname and, hence, improper. The claims are indefinite because of the brandname.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 29, 30, 43, 34, 47, 37, 49, and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Roth (US 4,065,287).

As to Claim 29, Roth discloses a method of applying to the foliage (col. 4 line 2) an attractant (sex attractant of col. 3 lines 19-23) comprising an aqueous solution (col. 3 lines 32-54, defining MAS as an aqueous solution) of an assimilable carbon skeleton energy component (col. 3 lines 32-54 with sludge defined as an assimilable carbon skeleton energy component); a

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macronutrient (N-P-K of col. 3 lines 5-13); a micronutrient (trace elements of col. 3 lines 13-14); a vitamin/cofactor component (growth regulator of col. 3 lines 14-16); and, a complexing agent (DAS of col. 4 lines 63-68). The method of Roth would inherently attract some insects by olfactory stimuli and the life cycle of the insect would be disrupted.

As to Claim 30, Roth further discloses an emulsion of crop oil in the composition (col. 5 lines 28-48).

As to Claim 43, Roth further discloses the carbon skeleton energy component as one on the group of components listed in Claim 43 (Examiner considers it inherent that sludge would have some of these compound in it.).

As to Claim 34, Roth discloses a method of coating a seed (col. 4 lines 46-62) with a composition comprising a carbon skeleton energy component (col. 3 lines 32-54 with sludge defined as a carbon skeleton energy component); a macronutrient (N-P-K of col. 3 lines 5-13); a micronutrient (trace elements of col. 3 lines 13-14); a vitamin/cofactor component (growth regulator of col. 3 lines 14-16); and, a complexing agent (DAS of col. 4 lines 63-68).

As to Claim 47, Roth further discloses the carbon skeleton energy component as one on the group of components listed in Claim 47 (Examiner considers it inherent that sludge would have some of these compound in it.).

As to Claim 37, Roth discloses seeds coated (col. 4 lines 46-62) with a composition comprising an assimilable carbon skeleton energy component (col. 3 lines 32-54 with sludge defined as a carbon skeleton energy component); a macronutrient (N-P-K of col. 3 lines 5-13); a micronutrient (trace elements of col. 3 lines 13-14); a vitamin/cofactor component (growth regulator of col. 3 lines 14-16); and, a complexing agent (DAS of col. 4 lines 63-68).

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As to Claim 49, Roth further discloses the carbon skeleton energy component as one on the group of components listed in Claim 49 (Examiner considers it inherent that sludge would have some of these compound in it.).

As to Claim 40, Roth discloses a method of applying to the soil a composition comprising a assimilable carbon skeleton energy component (col. 3 lines 32-54 with sludge defined as a carbon skeleton energy component); a macronutrient (N-P-K of col. 3 lines 5-13); a micronutrient (trace elements of col. 3 lines 13-14); a vitamin/cofactor component (growth regulator of col. 3 lines 14-16); and, a complexing agent (DAS of col. 4 lines 63-68).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roth (US 4,065,287) in view of Van Steenwyk et al. (US 4,605,560).

As to Claim 31, the limitations of Claim 30 are disclosed as described above. Not disclosed is the insect the navel orange worm. Van Steenwyk et al. disclose the use of a composition to disrupt ovipositioning of the navel orange worm (abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Roth by using it on navel orange worm, as disclosed by Van Steenwyk, so as to control a pest that causes serious economic loss to growers (see Van Steenwyk et al. col. 1 lines 9-12).

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Claims 32, 33, 44, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Army et al. (US 4,161,084) in view of Roth (US 4,065,287).

As to Claim 32, Army et al. discloses the method of applying to the surface of plants non-ice nucleating microorganisms that are antagonistic to ice-nucleating microorganisms (col. 7 lines 29-53). Not disclosed is the carrier composition having assimilable carbon skeleton/energy component, macronutrient component, micronutrient component, vitamin/cofactor component (growth regulator of col. 3 lines 14-16), and, a complexing agent (DAS of col. 4 lines 63-68). Roth, however, discloses a carrier composition having a carbon skeleton/energy component (col. 3 lines 32-54 with sludge defined as a carbon skeleton energy component), a macronutrient component (N-P-K of col. 3 lines 5-13), a micronutrient component (trace elements of col. 3 lines 13-14), a vitamin/cofactor component (growth regulator of col. 3 lines 14-16), and, a complexing agent (DAS of col. 4 lines 63-68). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Army et al. by using the carrier composition of Roth so as to find a use for sludge (see Roth col. 2 lines 25-30).

As to Claim 33, Army et al as modified by Roth further disclose including the organism in the carrier composition before application (see Army col. 7 lines 34-36).

As to Claim 44, the limitations of Claim 32 are disclosed as described above. Not disclosed is the complexing being selected from a group of specific agents. However, because DAS and the agents listed in Claim 42 were art-recognized equivalents at the time of the invention in those methods/compositions where it is immaterial as to the exact molecular formula of the complexing agent, one of ordinary skill in the agronomic art would have found it

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obvious to substitute one of the agents in the list in Claim 42 for DAS in the method/composition of Roth.

As to Claim 45, Arny et al. as modified by Roth further discloses the carbon skeleton energy component as one on the group of components listed in Claim 43 (Examiner considers it inherent that the sludge of Roth would have some of these compound in it.).

Claims 35, 42, 46, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roth (US 4,065,287).

As to Claim 35, the limitations of Claim 34 are disclosed as described above. Not disclosed is the step of removing pathogens prior to coating the seed. Examiner takes official notice that it is old and notoriously well known in the seed trade art to wash and soak seed. This would inherently remove pathogens. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Roth by first washing the seed so as to remove an soil etc. from the seed.

As to Claim 42, the limitations of Claim 29 are disclosed as described above. Not disclosed is the complexing being selected from a group of specific agents. However, because DAS and the agents listed in Claim 42 were art-recognized equivalents at the time of the invention in those methods/compositions where it is immaterial as to the exact molecular formula of the complexing agent, one of ordinary skill in the agronomic art would have found it obvious to substitute one of the agents in the list in Claim 42 for DAS in the method/composition of Roth.

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As to Claim 46, the limitations of Claim 34 are disclosed as described above. Not disclosed is the complexing being selected from a group of specific agents. However, because DAS and the agents listed in Claim 46 were art-recognized equivalents at the time of the invention in those methods/compositions where it is immaterial as to the exact molecular formula of the complexing agent, one of ordinary skill in the agronomic art would have found it obvious to substitute one of the agents in the list in Claim 46 for DAS in the method/composition of Roth.

As to Claim 48, the limitations of Claim 37 are disclosed as described above. Not disclosed is the complexing being selected from a group of specific agents. However, because DAS and the agents listed in Claim 48 were art-recognized equivalents at the time of the invention in those methods/compositions where it is immaterial as to the exact molecular formula of the complexing agent, one of ordinary skill in the agronomic art would have found it obvious to substitute one of the agents in the list in Claim 48 for DAS in the method/composition of Roth.

Claims 36 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roth (US 4,065,287) in view of Novitski et al. (US 5,264,210).

As to Claim 36, the limitations of Claim 34 are disclosed as described above. Not disclosed is including microorganisms which act on the soil to promote germination. Novitski et al., however, disclose adding *P. cepacia* to seed to promote growth (abstract and col. 9 lines 4-13 and 28-61). It would have been obvious to one of ordinary skill in the art at the time of the

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invention to modify the method of Roth by adding a microorganism as disclosed by Novitski et al. so as to retard attack by nematodes (see abstract of Novitski et al.).

As to Claim 41, the limitations of Claim 40 are disclosed as described above. Not disclosed is including microorganisms which act on the soil to act as an antagonist of a soil pathogen. Novitski et al., however, disclose adding *P. cepacia* to act as an antagonist of a soil pathogen (abstract and col. 9 lines 4-13). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Roth by adding a microorganism as disclosed by Novitski et al. so as to retard attack by nematodes (see abstract of Novitski et al.).

Claims 38, 39, 50, and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Novitski et al. (US 5,264,210) in view of Roth (US 4,065,287).

As to Claims 38 and 39, Novitski et al. disclose a method of applying to the roots (col. 9 lines 7 and 8) a composition comprising a micro-organism (*P. cepacia* of abstract). Not disclosed is the carrier composition having an assimilable carbon skeleton/energy component; a macronutrient component; a micronutrient component; a vitamin/cofactor component (growth regulator of col. 3 lines 14-16); and, a complexing agent (DAS of col. 4 lines 63-68). Roth, however, discloses a carrier composition having an assimilable carbon skeleton/energy component (col. 3 lines 32-54 with sludge defined as a carbon skeleton energy component); a macronutrient component (N-P-K of col. 3 lines 5-13); a micronutrient component (trace elements of col. 3 lines 13-14); a vitamin/cofactor component (growth regulator of col. 3 lines 14-16); and, a complexing agent (DAS of col. 4 lines 63-68). It would have been obvious to one

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of ordinary skill in the art at the time of the invention to modify the method of Novitski et al. by using the carrier composition of Roth so as to find a use for sludge (see Roth col. 2 lines 25-30).

As to Claim 50, the limitations of Claim 38 are disclosed as described above. Not disclosed is the complexing being selected from a group of specific agents. However, because DAS and the agents listed in Claim 50 were art-recognized equivalents at the time of the invention in those methods/compositions where it is immaterial as to the exact molecular formula of the complexing agent, one of ordinary skill in the agronomic art would have found it obvious to substitute one of the agents in the list in Claim 50 for DAS in the method/composition of Novitski et al. as modified by Roth.

As to Claim 51, Novitski et al. as modified by Roth further discloses the carbon skeleton energy component as one on the group of components listed in Claim 51 (Examiner considers it inherent that sludge would have some of these compound in it.).

Response to Arguments

Applicant's arguments filed in the Amendment, paper no. 8 (entered 21 August 2002), have been fully considered but they are not persuasive. The crux of Applicant's argument is that Roth does not disclose a vitamin/cofactor component (Applicant's Amendment page 8 1st para.). Examiner considers a vitamin or a cofactor or both to be within the ambit of growth regulator as defined by Roth at col. 3 lines 14-16.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

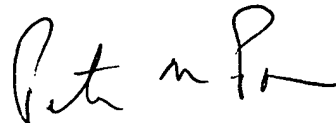
Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Jeffrey L. Gellner whose telephone number is 703.305.0053. The Examiner can normally be reached Monday through Thursday from 8:30 am to 4:00 pm. The Examiner can also be reached on alternate Fridays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Peter Poon, can be reached at 703.308.2574. The fax phone numbers for the Technology Center where this application or proceeding is assigned are 703.305.7687, 703.305.3597, and 703.306.4195.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.308.1113.



Jeffrey L. Gellner



PETER M. POON
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